

WHAT IS CLAIMED IS:

1. A data recording method for recording user data and management data used for management of said user data into a recording medium, comprising the steps of;

5 reading the latest management data recorded on said recording medium;

judging whether a fault is in said latest management data or not; and

10 comparing, when it is judged that the fault is not in said latest management data, a data size of the user data under the management of said latest management data with a data size of the user data recorded in said recording medium.

15 2. A data recording method according to claim 1, wherein when said latest management data cannot be read, or when it is judged the fault is in said latest management data or when it is judged that a data size of the user data under the management of said latest management data is not identical to a data size of the user data recorded in said recording medium, said management data is updated by analyzing the user data recorded in said recording medium.

20 3. A data recording method according to claim 2, wherein when it is judged that the fault is in said user data when analyzing said user data, said management data is updated by reflecting that said defective part is never reproduced.

4. A data recording method according to claim 2, wherein said recording medium is formed in the shape of a disc; and said management data is recorded in the recording area which is inside of the recording area of said user data.

5 5. A data recording method according to claim 2, wherein the power supply condition is judged before the update of said management data and when the power supply is not the commercial AC power source, a warning is issued to an operator.

10 6. A data recording method according to claim 2, wherein the power supply condition is judged before the update of said management data and only when the power supply is the AC commercial power source, said management data is updated.

15 7. A data recording method according to claim 1, wherein when said latest management data cannot be read or when it is judged that the fault is in said latest management data,

the management data recorded before the recording of said latest management data is read;

20 a data indicating a data size of the user data under the management of the management data recorded before the recording of said latest management data is gotten;

said management data is updated by analyzing the user data not under the management of the management data recorded before the recording of said latest management data; and

when it is judged that a data size of the user data under

the management of said latest management data is not identical to a data size of the user data recorded in said recording medium;

said management data is updated by analyzing the user data not under the management of said latest management data.

8. A data recording method according to claim 7, wherein when it is judged that the fault is in said user data on the occasion of analyzing said user data, said management data is updated by reflecting that said defective portion is never reproduced.

9. A data recording method according to claim 7, wherein said recording medium is formed in the shape of a disc and said management data is recorded to the recording area which is inside of the recording area of said user data.

10. A data recording method according to claim 7, wherein the power supply condition is judged before the update of said management data and when the power supply is not the AC commercial power source, a warning is issued to an operator.

11. A data recording method according to claim 7, wherein the power supply condition is judged before the update of said management data and only when the power supply is the AC commercial power source, said management data is updated.

12. A data recording method according to claim 1, comprising the steps of:

judging whether said recording medium allows the rerecording or not after the power supply of said data recording apparatus is turned ON;

reading the latest management data recorded in said recording medium when said recording medium does not allow the rerecording;

judging whether the fault is or not in said latest management data; and

comparing, when it is judged that the fault is not in said latest management data, a data size of the user data under the management of said latest management data with a data size of the user data recorded in said recording medium.

13. A data recording apparatus for recording user data and management data for management of said user data to a recording medium, comprising:

a data reading means for reading a data recorded in said recording medium;

a management data storing means for tentatively storing said management data;

a management data developing means for developing said management data to said management data storing means; and

a judging means for judging the data read from said recording medium; wherein said data reading means reads the latest management data recorded on said recording medium,

said judging means judges whether said latest management data is read or not, said management data developing means develops said latest management data into said management data storing means, said judging means judges whether a fault is in said latest management data or not, and said judging means compares a data size of the user data under the management of said latest management data with a data size of the user data recorded in said recording medium.

14. A data recording apparatus according to claim 13, comprising:

a user data analyzing means for analyzing said user data; and

a management data generating means for generating management data based on the contents of said analyzed user data;

when said judging means judges that said latest management data is not yet read or when said judging means judges that the fault is in said latest management data, said data reading means reads, from said recording medium, the management data recorded before the recording of said latest management data, said management data developing means stores the management data recorded before the recording of said latest management data to said management data storing means, said data reading means reads the user data which is

not under the management of the management data recorded before the recording of said latest management data, said user data analyzing means analyzes the user data read by said data reading means, said management data generating means generates the management data based on the contents of the user data analyzed by said user data analyzing means, when said judging means judges that a data size of the user data under the management of said latest management data is not identical to a data size of the user data recorded in said recording medium, said data reading means reads the user data not under the control of said latest management data, said user data analyzing means analyzes the user data read by said data reading means and said management data generating means generates the management data based on the contents of the user data analyzed by said user data analyzing means.

15. A data recording apparatus according to claim 14, wherein when said judging means judges that the fault is in said user data, said management data generating means generates management data reflecting that said defective part is never reproduced.

16. A data recording apparatus according to claim 13, comprising a recording medium judging means for judging whether a recording medium is a rerecordable one or a non-rerecordable one, wherein when said recording medium judging

means judges said recording medium as a non-rerecordable one,
 said data reading means reads the latest management data
 recorded in said recording medium, said judging means judges
 whether said latest management data is read out or not, said
 5 management data developing means develops said latest
 management data into said management data storing means, said
 judging means judges whether the fault is in the said latest
 management data or not and compares a data size of the user
 data under the management of said latest management data with
 10 a data size of the user data recorded in said recording medium.

17. A data recording apparatus for recording user data
 and management data used for management of said user data,
 comprising:

15 a driver for reading a data recorded in said recording
 medium;

management data recording medium memory for tentatively
 storing said management data; and

a controller for controlling said data recording
 apparatus , wherein

20 said controller controls said driver to read the latest
 management data recorded in said recording medium, judges
 whether said latest management data is read or not and develops
 said latest management data into said management data
 recording medium memory to judge whether a fault is in said

latest management data or not in order to compare a data size of user data under the management of said latest management data with a data size of the user data recorded in said recording medium.

5 18. A data recording apparatus according to claim 17, wherein said controller controls, when it is judged said latest management data is not read or when it is judged the fault is in said latest management data, said driver to read management data recorded before the recording of said latest management data from said recording medium and to store the management data recorded before the recording of said latest management data to said management data storing memory, also controls said driver to read user data not under the management of the management data recorded before the recording of said latest management data and analyzes the user data read by said driver to generate management data based on contents of said analyzed user data, and moreover controls said driver, when a data size of the user data under the management of said latest management data is not identical to a data size of the user data recorded in said recording medium, to read the user data not under the management of said latest management data and analyzes the user data read by said driver and generates management data based on contents of said analyzed user data.

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19. A data recording apparatus according to claim 18, wherein said controller generates, when it is judged the fault is in said user data, management data by reflecting that said defective part is never reproduced.

5 20. A data recording apparatus according to claim 17, wherein said controller judges a said recording medium is a rerecordable or not, and when said controller judges said recording medium is a non-rerecordable, controls said driver to read the latest
10 management data recorded in said recording medium, judges whether said latest management data is read or not, develops said latest management data into said management data recording medium memory, judges whether the fault is in said
15 latest management data or not and compares a data size of the user data under the management of said latest management data with a data size of the user data recorded in said recording medium.